

MINNESOTA'S MINING INDUSTRY

The Minnesota mining industry has made a strong comeback in recent years.



Recent data show mining employment in northeastern Minnesota has climbed 25 percent in the last two years, reaching more than 4,500 jobs.



A recent analysis by DEED ranked mining among the highest-paying jobs in Minnesota.

The job outlook for the industry remains strong. Mining or taconite processing aren't the only jobs available in the industry.



Careers range from those requiring vocational and technical training, such as welders, millwrights and electricians, to

positions requiring advanced degrees in engineering and business.



Top Mining Occupations in Northeast Minnesota

Heavy Equipment Mechanics

Median wage: \$26.52/hr

Projected job openings in NE MN, 2010-2020: 240

Education/training requirements: Postsecondary vocational award or related work experience.

Typical job titles: Field Mechanic, Mechanic, Heavy Equipment Mechanic

Typical job duties:

- ▶ Perform routine maintenance checks to ensure machines function well.
- ▶ Operate or inspect heavy equipment to locate defects.
- ▶ Use meters and hand-held computers to diagnose components that need repair.

Industrial Machinery Mechanics

Median wage: \$31.02/hr

Projected job openings in NE MN, 2010-2020: 300

Education/training requirements: Postsecondary vocational award.

Typical job titles: Engineering Technician, Industrial Electrician, Industrial Mechanic

Typical job duties:

- ▶ Perform routine maintenance of machinery. Clean and lubricate parts and equipment.
- ▶ Talk to machinery operators to evaluate how machinery is working.
- ▶ Examine parts for defects or wear.

Heavy Truck Drivers

Median wage: \$22.93/hr

Projected job openings in NE MN, 2010-2020: 730

Education/training requirements: Moderate-term on-the-job training. Commercial Driver's License required.

Typical job titles: Flatbed Truck Driver, Feeder Driver

Typical job duties:

- ▶ Drive large trucks or tractor-trailer combinations to transport goods.
- ▶ Follow safety procedures when transporting dangerous cargo.
- ▶ Read bills of lading to determine assignment details.

Electricians

Median wage: \$32.65/hr

Projected job openings in NE MN, 2010-2020: 460

Education/training requirements: Postsecondary vocational award or long-term on-the-job training may be required.

Typical job titles: Control Electrician, Electrician Technician, Industrial Electrician

Typical job duties:

- ▶ Install or connect piping, junction boxes, wiring, and electrical fixtures.
- ▶ Inspect and test electrical systems to diagnose problems and make sure they work.
- ▶ Test electronic components using ammeters, voltmeters, oscilloscopes, and other equipment.

Furnace and Kiln Operators

Median wage: \$26.15/hr

Projected job openings in NE MN, 2010-2020: 80

Education/training requirements: Moderate-term on-the-job training.

Typical job titles: Kiln Operator, Furnace Operator, Fireman

Typical job duties:

- ▶ Weigh or measure materials for processing, using devices such as scales and calipers.
- ▶ Adjust controls in order to activate and regulate equipment according to specifications.
- ▶ Monitor equipment operation, gauges, and panel lights in order to detect deviations from standards.



Earth Drillers

Median wage: \$24.40/hr

Projected job openings in NE MN,
2010-2020: 60

Education/training requirements:
Moderate-term on-the-job training.

Typical job titles: Blaster, Rock Drill Operator

Typical job duties:

- ▶ Drive or guide trucks or other vehicle-mounted equipment into position.
- ▶ Level or stabilize rig.
- ▶ Assemble and position drilling machine.



Crushing and Grinding Machine Operators

Median wage: \$24.88/hr

Projected job openings in NE MN,
2010-2020: 70

Education/training requirements:
Moderate-term on-the-job training.

Typical job titles: Machine Operator, Grinder Operator, Miller, Mill Operator

Typical job duties:

- ▶ Read work orders to determine production specifications.
- ▶ Set up, operate, and adjust machinery that crushes, grinds, polishes, or blends materials.
- ▶ Observe operation of equipment to ensure continuity of flow, safety, and efficient operation.



Dispatchers

Median wage: \$26.40/hr

Projected job openings in NE MN,
2010-2020: 60

Education/training requirements:
Moderate-term on-the-job training.

Typical job titles: Dispatcher, Communications Officer

Typical job duties:

- ▶ Receive incoming calls and determine the response needed for the situation.
- ▶ Schedule and dispatch appropriate work crews, equipment, or service vehicles.
- ▶ Use radio, telephone, or computer to transmit assignments; compile reports on work progress.



Operating Engineers and Construction Equipment Operators

Median wage: \$27.29/hr

Projected job openings in NE MN,
2010-2020: 300

Education/training requirements:
Postsecondary vocational award or long-term on-the-job training.

Typical job titles: Excavator Operator, Grader Operator, Machine Operator

Typical job duties:

- ▶ Learn and follow safety regulations. Avoid hazards such as utility lines and falling objects.
- ▶ Operate power construction equipment, such as motor graders, bulldozers, scrapers, or front-end loaders.
- ▶ May repair and maintain equipment.

Separating and Filtering Machine Operators

Median wage: \$26.41/hr

Projected job openings in NE MN,
2010-2020: 50

Education/training requirements:
Moderate-term on-the-job training.

Typical job titles: Machine Operator, Refinery Operator

Typical job duties:

- ▶ Set up or adjust machine controls to regulate conditions such as material flow, temperature, or pressure.
- ▶ Start agitators, shakers, conveyors, pumps, or centrifuge machines, then turn valves or move controls to separate, filter, mix, or transfer materials.

Other mining occupations include welders, mechanical and industrial engineers, chemical technicians, and more.

You can learn more about these and other mining occupations at www.iseek.org.